National System for Geospatial Intelligence

The Growing Need for a GEOINT Data Strategy

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Agenda

- GEOINT Functional Management
- Foundation Based Operations
- GEOINT Data Strategy
- Geospatial Data Strategy
- Summary

Functional Management Structure

Foundation-based Operations (FBO) Defined

Standards, processes, systems, and resources for producing and managing integrated global GEOINT to meet customer-specific needs. FBO includes the ability to populate and maintain content with surge capability and capacity.

FBO Components

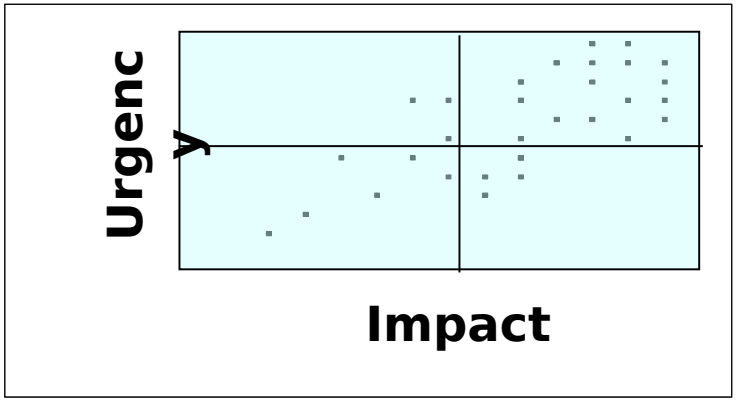
Resources enable Unified Operations across the NSG
- FYDP Geospatial Production Plan
- NSG Analysis and Production Plan

Standards enable Interoperability across the NSG
- National Center for GEOINT Standards
- Data Content Model, Implementation Guides and Extraction G

Processes enable Interoperability and Transparency across the NSG
- Requirements Process/CJCSI 3901.01b
- Tactics, Techniques, and Procedures

Systems enable capabilities across the NSG
- Driver for R&D Investments
- Operational Investments (Hardware & Software)

FBO Top Priorities

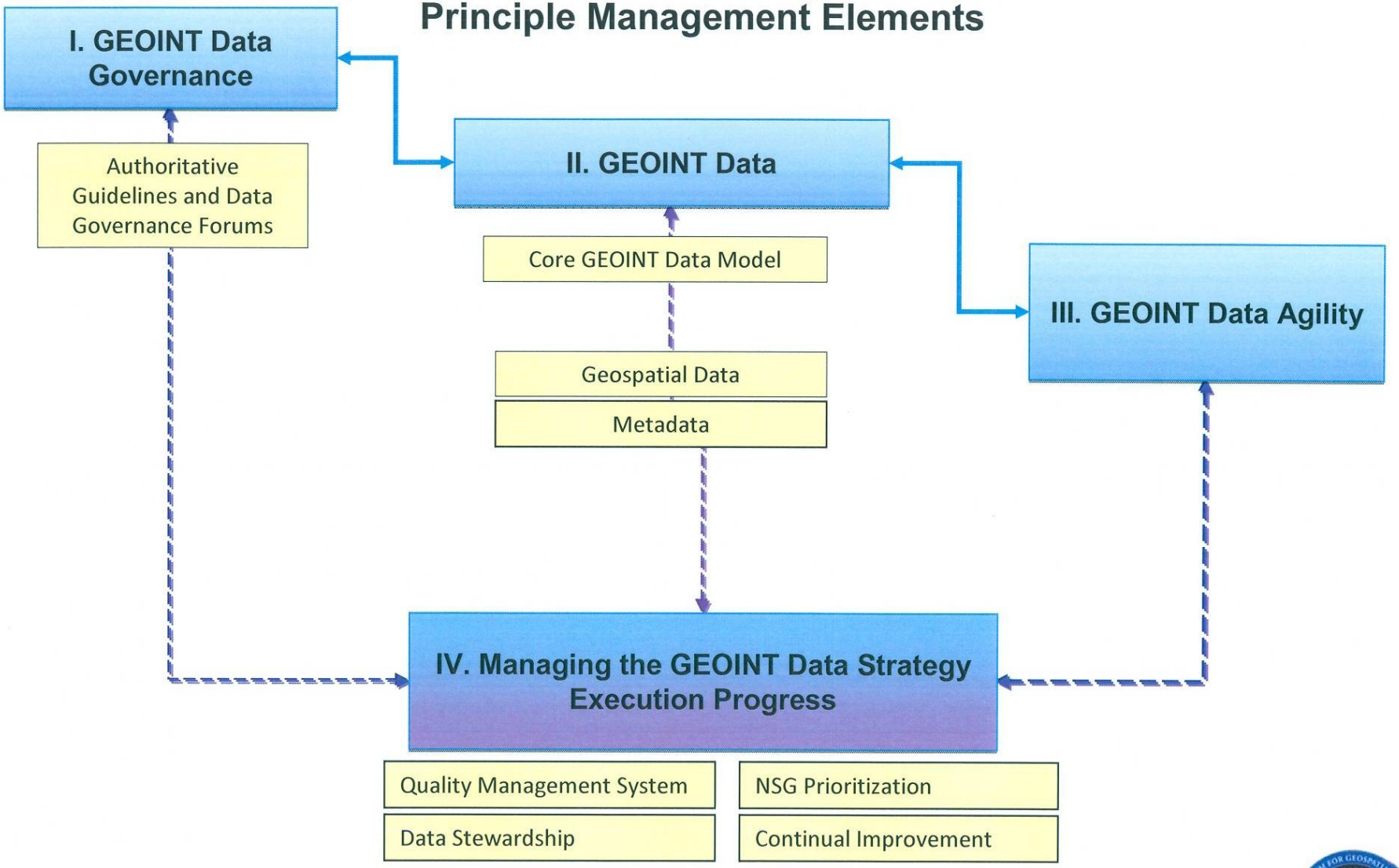


- Data Strategy
- Requirements Satisfaction
- Single Query Capability
- Technology Insertion Process

The GEOINT Data Strategy *IS*:

- A capstone document to provide the NSG Governing Authority
  - *How* NSG manages GEOINT data
  - "*What*" components align with the ODNI Enterprise Architecture and DoD Directive 8320.02
- Defines GEOINT data types and associated processes
  - Data Requirements
  - Data Collection
  - Data Analysis
  - Data Production
  - Data Storage
  - Data Dissemination
  - Quality Assurance

GEOINT Data Strategy (Level I)
Principle Management Elements



Progress of GEOINT Data Strategy

NSG GEOINT Data Strategy

✓To be vetted to the NSG for comment

NGA GEOINT Data Strategy

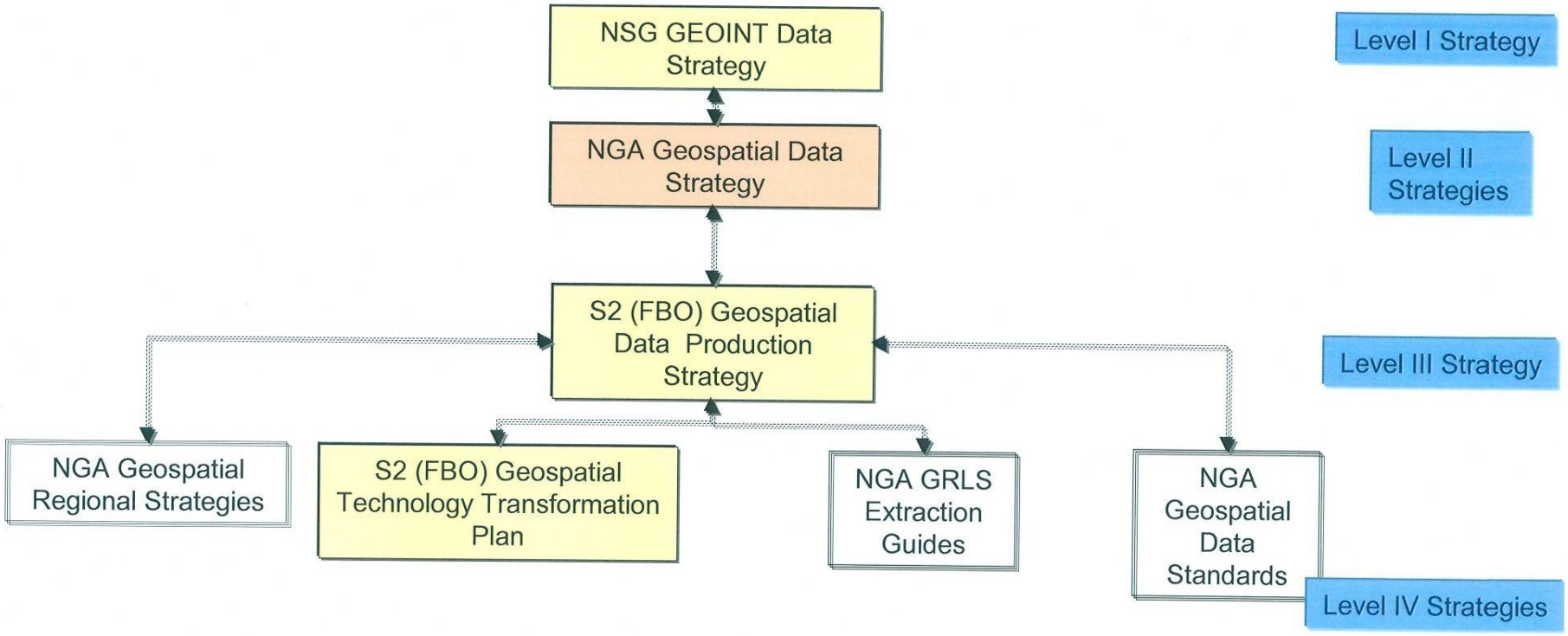
✓ Provide a holistic approach to address GEOINT data management

NGA Geospatial Data Strategy

✓ Focus on development of the NGA Geospatial Data Production Plan

NSG GEOINT Data Strategy

Nesting Foundation Based Operations (FBO) Geospatial Strategies


NSG GEOINT Data Strategy
NGA Geospatial Data Strategy
S2 (FBO) Geospatial Data Production Strategy
NGA Geospatial Regional Strategies
S2 (FBO) Geospatial Technology Transformation Plan
NGA GRLS Extraction Guides
NGA Geospatial Data Standards
Level I Strategy
Level II Strategies
Level III Strategy
Level IV Strategies

Data Strategy Defined

An enterprise methodology for turning data into information and knowledge, which in turn produces measurable improvements in business performance. The elements of the strategy include data and metadata standards, data collection, a production strategy, a storage and access strategy, a geospatial intelligence assurance strategy, metrics, and the incorporation of value-added data.

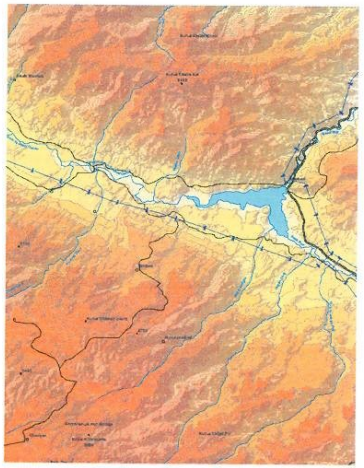
Enables Unified GEOINT Operations

NGA Geospatial Data Strategy: Data Domains

DENSITY	Controlled Mono	Controlled Stereo	Elevation	Features/ Political Geography	Aero	Maritime	Geodetic Information	
							Gravity	Magnetic
GLOBAL	**Some Data Everywhere**							
REGIONAL	**Better density**							
LOCAL	**Higher density**							
SPECIALIZED	**Highest density**							

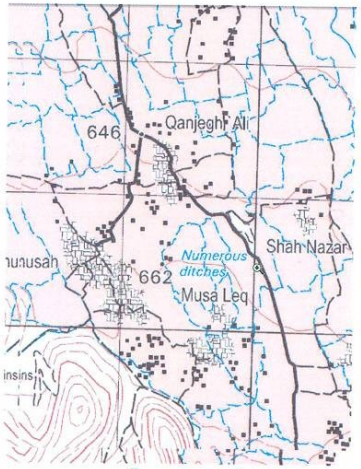
Data Domain: Features

Density	Data Type	Horiz. Acc	Format	Scale
Global	DeLorme, Tactical Pilotage Chart	50m - 2050m	FACC	≥ 400k
Regional	Joint Operations Graphic	10m - 125m	FACC	> 200k-399k
Local	Topo Line Map/1:50k	23m	DFDD/FACC	≥ 24k - 200k
Specialized	Urban Feature Data Image City Map	5m	FACC	< 24k

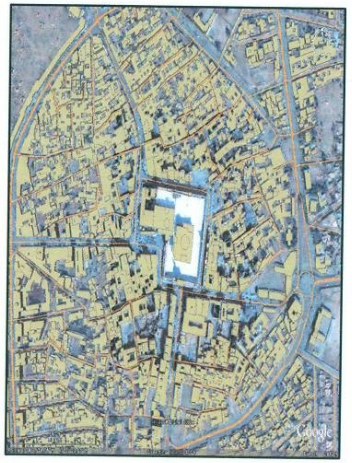


Global

Regional



Local



Specialized

FBO Standards and Specifications

- Specifications for extracting Foundation Based Data:
  - GRLS (Global/Regional/Local/Specialized) Data Content Specifications (DCS)
    - **Global (>=400K)** –Released 20 February 2009
    - **Regional (>200-399K)** – Released 30 January 2009
    - **Local (24-200K)** – Released 14 October 2008
    - **Specialized (<24K)** – Released 23 December 2008
- Quality Management Processes:
  - Geospatial Analysis Integrity Tool (GAIT) for data
  - NGA Geospatial Data Governance Board (GDB)
  - NGA Standards Board and Geospatial Intelligence Standards Working Group (GWG)

NSG Data Strategy: Why is it important?

- Establishes a construct to identify & manage geospatial data requirements
  - Standards, Formats, Accuracy, Currency, Resolution, Outputs
- Drives multi-year resource allocation across the NSG
  - Tradecraft investment
  - Government and Contractor skill mix
  - Technology investment priority
- Influences
  - Unified GEOINT Operations
  - Commercial Technologies
  - Commercial contractor investments
  - Open Source opportunities

Bottomline:
Drives creation of NSG FBO Plan

Summary

- Data Strategy establishes Functional Management of FBO across the NSG
  - Enables interoperability
  - Establishes environment to execute FBO across the NSG
    - Maximizes resources
    - Minimizes duplication

It's all about the data strategy!!

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